

**ACADEMIC ADVISORY SYSTEM
(ACADS)**

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To my beloved family and friends, thank you very much for the support and understanding. Truly appreciate it.

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ABSTRACT

Academic Advisory System (ACADS) is a web-based information system. It Academic Advisory is a system that provides assistance and guidance to the students in the aspects of education, teaching, learning and assessment to ensure academic excellence. Several steps involved in producing Academic Advisory System. The steps include registration, determining students' progress coursework, examination, and reporting. The main user of this system is academic advisor. The methodology used is System Analysis and Design (SADM). For the initial finding, this project cover As-Is business process and data model, To-Be business process and data model, user requirements, database design, system architecture, and user interface design. From the problem analysis of current business process, there are weaknesses and constraints in the implementation of academic advisory system. Consequently, this system requires long time and lots of efforts because several support functions for ACADS has to develop first. Hopefully, the implementation of ACADS can help organizations in organizing and maintaining students' performance.

ABSTRAK

Sistem Penasihat Akademik (ACADS) adalah system maklumat berasaskan-web. Penasihat Akademik adalah sistem yang menyediakan bantuan dan panduan kepada pelajar dalam aspek pendidikan, pengajaran dan pembelajaran, serta penilaian untuk memastikan kecemerlangan akademik. Beberapa langkah diambil dalam menghasilkan sistem ini termasuk pendaftaran, menentukan perkembangan markah kerja kursus pelajar, peperiksaan dan laporan. Pengguna utama sistem ini ialah penasihat akademik. Metodologi yang digunakan ialah Analisis dan Rekabentuk Sistem. Bagi carian awal, projek ini meliputi proses bisnes semasa dan model data, proses bisnes cadangan dan model data, keperluan pengguna, rekabentuk pangkalan data, senibina sistem dan rekabentuk antaramuka pengguna. Daripada analisis keadaan semasa, terdapat banyak kelemahan dan kekangan dalam melaksanakan sistem ini. Kesannya, pelaksanaan sistem ini memerlukan masa yang panjang dan usaha yang tinggi kerana beberapa fungsi sokongan kepada sistem perlu dibangunkan terlebih dahulu. Diharapkan dengan pelaksanaan Sistem Penasihat Akademik dapat membantu organisasi dalam mengurus dan mengekalkan prestasi pelajar.

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CHAPTER 1

PROJECT OVERVIEW

1.1 Introduction

Academic Advisory is a critical part of institute of higher learning long-term academic goals and planning. The overall philosophy of Academic Advisory is to help students to improve the academic and non-academic experience during their studies in college.

The Academic Advisory System is a system that provides assistance and guidance to the students in the aspects of education, teaching, learning and assessment to ensure academic excellence. Upon enrolment, each student will be under the guidance of an experienced and doting Academic Advisor.

1.2 Background of Problem

Darulnaim College of Technology (KTD) is one of the franchise colleges that runs UTM's Diploma. Currently, KTD offers five courses which are Diploma in Computer Science (IT), Diploma in Computer Science (Multimedia), and Diploma in Management Technology, Diploma in Management Technology (Accountancy) and Diploma in Electronic Engineering. As a higher learning institution, academic advisory is the most important thing especially in private higher learning institution (IPTS). KTD is very concern about students' performance, this leads too much works has to be done by Academic Advisor. All of the activities had been done manually by any other parties.

Every Advisor needs to know latest information about student under their coordination. What happens in my situation, even that Registry Department will refer to advisor when they need to know certain information of a student. They always come across difficulties in locating which advisor the advisee belongs to and sometimes advisor is not available.

Lecturers fill up the attendance report for poor student's attendance. They will distribute two copies to Academic Affairs Department (HEA), a copy to Students Affairs Department (HEP) and a copy to his or her advisor. This process is done manually, and some difficulties occur during this process, which are the form is missing, lecturer does not know the allocated advisor for the student. For serious cases when HEP refers to counselor, they always ask advisor by phone how many times that student were absent. The problem here is, those report are not compiled. By the end of the semester, advisor did not notice this student has very bad attendance history.

Another problem faced by advisor is when the file went missing. Sometimes, this happens when HEP or counselor failed to return the file to the advisor after borrowing the file for their investigation.

1.3 Statement of Problem

From the analysis of current business process, here are the problems occur in current business process:

- No mechanism relates to the students attendance, information and grading system.
- Student's information was not updated.
- No mechanism for lecturer, HEA and HEP staff to refer student's advisor.
- Unavailability of information when needed.
- Too much time spent to collect student's mark to prepare performance report.

1.4 Project Objectives

The project objectives for the proposed system are:

- To study and analyze the existing Academic Advisory System.
- To design and develop an online Academic Advisory System for academic staff including the academic system, advisory system and organize their student's record.
- To formulate organizational strategies for the implementation of the system.

1.5 Project Scope

This section is to define the boundary of the project consist of system functionalities, data used, software, hardware and platform requirements. It also describes features available and the system's user.

1.5.1 Functionalities

To provide at least the following functionalities:

- Subject registration
 - Students' information
 - Students' subject history
- Updating student's information.
- Provide coursework marks by lecturers
- Calculate student's grade.
 - coursework
 - final exam
- Generate student's performance report.
 - Coursework progress report
 - GPA and CPA report
 - Meeting report
 - Poor attendance report

1.5.2 Data

All data and resources available in HEA and Registry department for the guideline will be used by the system.

1.5.3 Software/Hardware/Platform

Software requirements needed are PHP as a programming language, Macromedia Dreamweaver MX 2004 to design interfaces, Microsoft SQL for database, Microsoft Office 2003, Microsoft Project 2003, and Microsoft Visio Professional 2003 for project documentation.

Personal computer or notebook, a server and network facilities are needed as the requirements for the hardware components. System will be operates on Windows Pro XP.

1.5.4 Features

Features available of this system such as web based application, operates on client-server architecture for lecturer for process that lecturer want to key in students marks and students want to view their results when they are outside of campus.

1.5.5 Users

This proposed system will be used by advisor, students, lecturers, academic affairs, student affair and counselor with an authorized access.

1.6 Project Importance

This study is supported by KTD's top management as it is planned to be implemented and hoped to improve the effectiveness and efficiency of the operation. Some of the expected significant importances are as follows:

- Reduce time - advisor does not have to wait for lecturers to get their student's marks.
- Student progress report – academic affairs can view or get the report automatically. This report also helps advisor to organize student record efficiently by recording or updating their meeting.
- Student report can be performed in a more effective and more flexible ways.
- Help advisor to monitor student's poor attendance record at early stage.

1.7 Chapter Summary

KTD should move towards using information technology to perform their daily business. Academic Advisory System should have implemented years ago. This will help organizations business process and can increase organization image. With the proposed system, it is hoped that this system will help the advisors, lecturers and the management to manage students' learning and performance. In

addition, reporting and queries can be provided and facilitated in more efficient manners.